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Abstract

Voltage-current converter with adjustable quiescent current

Method for controlling an output signal (A) of a voltage-current converting device, to which a reference voltage ( $U_{REF}$ ) is fed and in which a voltage signal (I, IX) applied on the input side is converted into a current signal, a reference voltage ( $U_{REF}$ ) setting the output quiescent current ( $I_0$ ). The provision of a setting device, which is connected to the reference input and is used to determine an envelope of an amplitude-modulated signal at the input is furthermore expedient.

Figure 1

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## Reference symbols:

(OP, OP1): Operational amplifier

(I, IX): Input signal

(DE): Level detection device

(PA): Line

 $(R_{FF}, R_{FB}):$  Resistors

(R<sub>E</sub>): Current source resistor

 $(U_{REF}):$  Reference voltage

(T1, T2): Transistors

(A): Collector

(I<sub>0</sub>): Current mirror

(R1, R2): Resistors of the low-pass filter
(C1, C): Capacitors of the low-pass filter

(C1, C): Capacitors of the low (C2): Capacitors

(R3, R4): Resistors

(S1): Switch